

1 **WHAT IS CLAIMED IS:**

2 1. A stator of an alternating current motor, the stator comprising:

3 a yoke (10) having an outer annular member (11) and an inner annular member
4 (12) integrally formed therewith, two winding slots (13) symmetrically defined at two
5 opposite lateral sides between the outer and inner annular members (11, 12), and two
6 cut-outs (14) symmetrically defined at two opposite sides of the outer annular member
7 (11) and respectively communicating with middle positions of the winding slots (13);

8 upper and lower insulators (20, 21) respectively assembled on upper and lower
9 ends of the yoke (10), and respectively having two outer rings (201, 211) and two inner
10 rings (202, 212) integrated therewith corresponding to the outer and inner annular
11 members (11, 12), two pairs of slots (203, 213) respectively defined at opposite sides
12 thereof corresponding to the winding slot (14) of the yoke (10), and two pairs of
13 openings (204, 214) respectively defined at opposite sides of the outer rings (201, 211)
14 corresponding to the cut-outs (14);

15 whereby after the upper and lower insulators (20, 21) are respectively
16 assembled on upper and lower ends of the yoke (10), wires of stator coils are
17 respectively wound around the upper and lower insulators (20, 21) and bind the upper
18 and lower insulators (20, 21) together with the yoke (10).

19 2. The stator as claimed in claim 1, wherein upper ends of the outer rings (201)
20 and inner rings (202) of the upper insulator (20) are respectively formed with bulged
21 outer edges (205) around outer sides thereof and bulged inner edges (206) around inner
22 sides thereof, lower ends of the outer rings (211) and inner rings (212) of the lower
23 insulator (21) are respectively formed with bulged outer edges (215) around outer sides
24 thereof and bulged inner edges (216) around inner sides thereof, the lower ends of the

1 slots (203) and upper ends of the slots (213) are respectively formed with bulged joint
2 edges (207, 217) therearound, whereby the upper and lower insulators (20, 21) are
3 respectively assembled on the yoke (13) by means of the joint edges (207, 217)
4 respectively inserted into the corresponding winding slot (14) of the yoke (10).

5 3. The stator as claimed in claim 1, wherein two joint keys (30) are respectively
6 fixed into the two cut-outs (14) of the yoke (10).